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Badesha, et al. is described in the present specification at page 6, lines 8-13. Badesha, et al. does not teach or suggest the presently claimed transfix component of *any kind* the image forming apparatus.

The present claims are directed towards a specific image forming apparatus that includes various elements, including a) a charge retentive surface, b) a development component, c) a transfer component, d) an intermediate transfer component, and e) a transfix component. The transfix component of the present claims transfers the developed image from the intermediate transfer component to a copy substrate, and fixes the developed image to the copy substrate. Badesha, et al. does not teach or suggest a transfix component as claimed. Instead, the reference teaches a fuser member comprising at least one layer of an elastomer composition comprising a silicone elastomer and a mica-type layered silicate. On the other hand, the present claims are directed to a transfix member comprising an outer layer comprising a mica-type layered silicate and silicone elastomer. The claimed transfix component both transfers the developed image from the intermediate transfer component to a copy substrate, and fixes the developed image to a copy substrate. The fuser member of Badesha, et al. is only taught to possess the ability to fix a developed image to a copy substrate. There is no teaching or suggestion in Badesha, et al. that the outer layer taught for use with the fuser member for fixing a toner image to a toner substrate, could be used in a transfix member for both transferring a developed image from an intermediate transfer component to a copy substrate, and fixing the developed image to the copy substrate. Therefore, there would have been no expectation of success that a layer taught for use with a fuser member would work as a layer for a transfix member as claimed. *DIS*

Further, Applicants submit that one of ordinary skill in the art would not have been motivated to use an outer layer taught for use on a fuser member, for use as an outer layer in a transfix component as claimed. The requirements for fusing a toner image to a copy substrate are completely distinguishable from the requirements for transferring a developed image from an intermediate transfer component to a copy substrate. To begin with, a fuser member needs to possess an outer layer having the *lack support*

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characteristics, which will allow the toner to be fused to a copy substrate without remaining on the fuser member. If the toner remains on the fuser member, the copy or print will not be suitable, and subsequent copies, prints or other parts of the machine, can be contaminated with the toner that was left on the fuser member. In addition, the fuser member outer layer must possess a certain thermal conductivity in order to allow the heat to be distributed from the fuser member to the outer layer, and subsequently fuse the toner to the copy substrate. On the other hand, a transfer component needs to have an outer layer which possesses the ability to attract a developed image from an intermediate transfer component and subsequently transfer that developed image to a copy substrate, and finally fix the developed image to the copy substrate. Therefore, the transfix component must have an outer layer having the ability to attract toner, transfer toner, and fix it to a copy substrate. One of the requirements of the transfer component is to attract a toner image from an intermediate transfer component. A fuser member does not need to possess this ability, as the developed image is already present on the copy substrate and the fuser member just fixes the developed image to the copy substrate. The fuser member does not attract toner, but instead, has the opposite property of making sure toner is not attracted to the fuser component. Such attraction of toner would cause the above contamination problems.

The Office Action states that the elements of the claimed apparatus, including a transfer component, intermediate transfer component, and development component, are directed to intended use and product by process elements. Applicants disagree, and point out that the claims are directed to an apparatus and not a product by process. In addition, the claims recite various components of the apparatus, and not simply an intended use. Applicants point out that Badesha et al. does not teach the elements of the claimed apparatus, including a) a charge retentive surface, b) a development component, c) a transfer component, d) an intermediate transfer component, and e) a transfix component. Instead, Badesha et al. teaches an apparatus including a photoreceptor for receiving a latent image, a developer unit for developing the image, a transfer member for transferring the developed image to a copy substrate, and a fuser member for fusing the developed image to the copy substrate. Bad sha et al. does not

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teach or suggest the claimed parts of the claimed apparatus including all three of a transfer component, intermediate transfer component, and transfix component.

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Therefore, the apparatus of the present claims is completely distinguishable from the apparatus taught by Badesha et al.

Turning to the secondary reference, Swift et al. does not teach or suggest an outer layer comprising a mica-type layered silicate and silicone elastomer. Instead, the reference teaches puzzle cut seamed belts, which can be useful as intermediate transfer members. The only teaching of the chemistry of the intermediate transfer member is given at column 5, lines 44-67, wherein various polymer materials are listed as possible substrates. However, there is no teaching of any outer layer, or outer layer materials. In addition, there is no teaching of any chemistry of any layers of a transfix member as claimed. There is simply no teaching in the reference that would have motivated one of ordinary skill in the art to substitute the outer layer of the fuser member of Badesha et al. onto a transfix member as claimed.

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Further, Swift et al. does not supply the deficiencies of the primary reference. Namely, Swift et al. does not teach the claimed apparatus comprising all three of a 1) a transfer component, 2) an intermediate transfer component, and 3) a transfix component. Instead, the reference teaches an intermediate transfer member that transfers the image to a fuser member or a transfix member (see also Figures 8 and 9, wherein there is no transfer member). Therefore, Swift et al., as with Badesha et al., does not teach or suggest the claimed apparatus comprising all three transfer members.

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Moreover, the Office Action states that Swift et al. teaches "interchanging the fuser and a transfix component." Swift et al. teaches that an intermediate transfer member can transfer a toner image "to the fuser member or a transfix component" (column 4, line 47). Applicants respectfully submit that the teaching that a developed toner image can be transferred to either a fuser member or transfix member, is not a teaching that a fuser member and transfix member are equivalent. It is further not a teaching or suggestion, that an outer layer taught as useful as an outer layer of a fuser member, would work as an outer layer of a transfix member as claimed.

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Because neither reference teaches or suggests the claimed apparatus including 1) a transfer component, 2) an intermediate transfer component, and 3) a transfix component, and further, because neither reference provides motivation for one of ordinary skill to use the outer layer of the fuser member of Badesha et al. as an outer layer of a transfix member, Applicants submit that the present claims are not rendered obvious in view of the cited combination. Accordingly, Applicants request withdrawal of the rejection of claims 1-10 and 13-21 under 35 USC §103(a) as obvious over Badesha, et al. (U.S. Patent 5,846,643) in view of Swift et al.

Claims 1-17 and 20-21 have been rejected under 35 U.S.C. §103(a) as obvious over Badesha et al. (U.S. 5,846,643, hereinafter, "Badesha et al. '643") in view of Badesha et al. (U.S. Patent 6,482,504, hereinafter, "Badesha et al. '504"). In response, Applicants traverse the rejection.

Badesha et al. '643 has been discussed above. Badesha et al. '504 teaches a transfix member having a substrate layer, an intermediate layer and an outer release layer (column 5). As the outer release layer, the reference teaches that a crosslinked silicone material may be used (column 7, lines 4-5). However, there is no teaching or suggestion in the reference that would have motivated one of ordinary skill in the art to substitute the outer mica-type silicate layer taught by Badesha et al. '643 as useful as an outer layer for a fuser member, for the outer layer of a transfix member as claimed or as taught by Badesha et al. '504. Instead, the secondary reference teaches use of small molecules in the intermediate layer that diffuse through the outer layer and can be useful as a release agent. Applicants submit that these teachings would not have motivated one of ordinary skill to make the substitution. There is no mention of the claimed mica-type silicate outer layer in the secondary reference. Further, there is no mention in the reference implying that materials taught as useful as outer layers for fuser members, could work well as outer layers for transfix members. D13

Therefore, neither reference provides the motivation to exchange the mica-type silicate outer fuser layer of Badesha et al. '643 for the outer layer of the transfix member as claimed or as taught by Badesha et al. '504. D13

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In view of the above, Applicants submit that the claims are not obvious in view of the cited combination, and request withdrawal of the rejection of claims 1-17 and 20-21 under 35 U.S.C. §103(a) as obvious over Badesha et al. '643 in view of Badesha et al. '504.

Claims 1, 4-8, 11-13, 15 and 18-21 have been rejected under the judicially created doctrine of obvious-type double patenting as obvious over claims 1, 8, 12-14 and 20 of Badesha et al. (U.S. Patent 6,411,793, hereinafter, "Badesha et al. '793") in view of Badesha et al. (U.S. 5,846,643, hereinafter, "Badesha et al. '643"). In response, Applicants traverse the rejection.

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The claims of Badesha et al. '793 recite a transfix member comprising a transfix substrate and an outer layer comprising a haloelastomer having pendant hydrocarbon chains covalently bonded to a backbone of the haloelastomer. This outer layer recited by the claims of Badesha et al. '793 is completely distinguishable from the outer layer as claimed. A haloelastomer comprises an elastomer and a halogen. In addition, the haloelastomer has pendant hydrocarbon chains covalently bonded to the backbone of the haloelastomer. The claimed outer layer comprises a mica-type layered silicate and silicone elastomer, wherein the elastomer and mica-type layered silicate together form a delaminated nanocomposite. A silicone elastomer as claimed is not similar in any way to a haloelastomer as taught by Badesha et al. '793. In addition, the claimed mica-type layered silicate and silicone elastomer delaminated nanocomposite, is completely distinguishable from the haloelastomer having pendant hydrocarbon chains covalently bonded to a backbone of the haloelastomer as claimed in Badesha et al. '793.

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Although Badesha et al. '643 teaches the claimed outer layer, the reference teaches that the outer layer is useful as an outer layer of a fuser member. There is no teaching in the claims of Badesha et al. '793 or the teachings of Badesha et al. '643 that would have motivated one of ordinary skill in the art to substitute the outer layer of the fuser member of Badesha et al. '643 for the outer layer of the transfix member of the claims of Badesha et al. '793. There is no teaching in either reference that fuser member outer layers work well as outer layers of transfix members. Further, the outer fuser member layer of Badesha et al. '643 is completely distinguishable from the outer

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layer of the claims of Badesha et al. '793. As set forth above, a silicone elastomer as taught is not similar in any way to a haloelastomer as taught by Badesha et al. '793. In addition, the mica-type layered silicate and silicone elastomer delaminated nanocomposite of Badesha et al. '643, is completely distinguishable from the haloelastomer having pendant hydrocarbon chains covalently bonded to a backbone of the haloelastomer as claimed in Badesha et al. '793. Therefore, there is no teaching or suggestion in the references that would have motivated one of ordinary skill to make the substitution of use of the outer silicate fuser layer of Badesha et al. '643 for the outer haloelastomer transfix layer of the claims of Badesha et al. '793.

Accordingly, Applicants submit that the present claims are not obvious in view of the cited combination, and request withdrawal of the rejection of claims 1, 4-8, 11-13, 15 and 18-21 under the judicially created doctrine of obvious-type double patenting as obvious over claims 1, 8, 12-14 and 20 of Badesha et al. '793 in view of Badesha et al. '643.

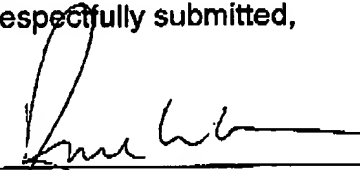
In view of the above arguments, Applicants submit that all claims should now be in condition for allowance. Early indication of allowability is respectfully requested.

No additional fee is believed to be required for this amendment. However, the undersigned Xerox Corporation attorney (or agent) hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Corporation Deposit Account No. 24-0025. This also constitutes a request for any needed extension of time and authorization to charge all fees therefor to Xerox Corporation Deposit Account No. 24-0025.

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In the event the Examiner considers personal contact advantageous to the disposition of this case, s/he is hereby authorized to call Applicant's Attorney, Annette L. Bade, at telephone number (310) 333-3682.

Respectfully submitted,

  
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